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Subject: Salmon Team "Analysis"

I spent some time on the hand drawn figure provided by Pat Brandes last week. It is incomplete, and so it is difficult to figure it out but:

1) I assume export pumping is the same in the two comparisons, at 15,000cfs. This would mean 15,000cfs direct diversion in the south Delta for the existing conditions, and 5,000 direct diversion in the south Delta with a 10,000cfs diversion at Hood.

2) I assume the flow at Vernalis is the same for the two conditions, but not indicated in the figure - I chose to set it at 1,000cfs - for this condition.

HOOD-Isolated Facility Figure

3) I assume Delta outflow is the same for both conditions. Given the second condition of 5,000cfs direct export from the south Delta, less 1,000cfs from Vernalis, less 2,159cfs through the center of the Delta equals a net reverse flow of 1,841 in the lower SJR.

Now, given 5,051cfs in the lower Sacramento, plus 2,790 from Sutter and Steamboat, less the 1,841cfs to meet pumping demand, leaves 6,000cfs for Delta outflow.

EXISTING Conditions Figure

4) There is 9,981cfs in the lower Sacramento, plus 6,530cfs from Sutter and Steamboat for a total of 16,511cfs to meet both demands. If we set Delta outflow at 6,000cfs for this figure, there is 10,511cfs left to meet the south Delta exports.

5) Now, if south Delta exports are 15,000cfs, less 1,000cfs from Vernalis, less 3,489cfs from the central Delta, then the 10,511cfs from the lower SJR will just meet the balance, without any Delta consumptive use!

Assuming my thought process is logical, then we will all move to make things better if we reduce flows in the lower Sacramento River to a point where survival for salmon is nil, Contra Costa water district gets no water, Delta agriculture ceases diversions, and we set up a net reverse flow of 10,000cfs in the lower SJR with only 6,000cfs of Delta outflow.

Or am I missing large inflows from the San Joaquin River basin?

As I recall, we moved away from 5,000cfs in the lower Sacramento River after the D-1379 hearings. You may recall that we got reverse flows at Hood under these conditions in 1977.

Dan